Efficacy Testing of Environmental Technology'

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Abstract

The Hemispheric Center for Environmental Technology (HCET) was established in 1995 by Florida International University (FIU) and the United States Department of Energy Office of Science end Technology (DOE-OST) to research, develop, and demonstrate innovative environmental technologies and to establish alliances that support the implementation of time technologies. HCET's research and development (R&D) activities focus on the decontamination and decommissioning (D&D) of nuclear facilities and the management and reduction of radioactive and hazardous wastes. These R&D activities support Department of Energy-Environmental Management (DOE-EM) programs in the areas of Decontamination and Decommissioning (D&D); Characterization Monitoring, end Sensor Technology (CMST); the Taok Focus Area (TFA); and the Robotics Crosscutting Program,

Many environmental problems in the Western Hemisphere cannot currently be resolved using existing technologies. These unique challenges require the development of new environmental technologies or the adaptation of existing technologies to address specific problems. The Hemispheric Center for Environmental Technology has the capability end resources to develop innovative technologies as well es assess and demonstrate technologies that have been developed or modified botb in-house and by other vendors. HCET also has the expertise to certify emerging technologies for particular or general use and will pursue, organize, and facilitate technology transfer from suppliers to consumers.

The Hemispheric Center for Environmental Technology brings together the resources of Florida International University (FIU), U.S. industry, the United States Department of Energy (DOE), and other government entities to facilitate the demonstration and transfer of new environmental technologies, and to facilitate the marketing of these technologies by U.S. industry in the Latin American and Caribbean nations (LACNs). To fulfill its mission, HCET aims to establish itself es the private organization with contacts to the LACNs and become a repository of information on environmental needs, policies, and funding priorities. HCET will also build awareness of the economic benefits of the use of sustainable technologies in tbe

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LACNs and establish an international environmental technology transfer clearinghouse to provide technologies, assistance, and training to the LACNS and U.S. industry.

In order to proceed with its partnership development in a focused and cat-effective manner, HCET plans to engage in the following additional activities:

- Based on its knowledge of the LACNS' environmental problems and existing agreements with the United States, HCET will consult with DOE-(XST to identify the technology that matches the specific needs of a country;

- After the technology has been identified, HCET will identify a U.S. industrial partner with whom to collaborate during the technology adaptation process, The partner will proceed with the implementation of the technology after completion of the demonstration.

- As the technology is being prepared for demonstration in the LACN, HCET's International Development Group will identify the organizations and individuals with whom relationships should be developed to reach to the demonstration stage;

- The International Development Group will define and lead the work involved with building the necessary partnerships to demonstrate and implement the technology;

- The International Development Group will also lead the effort associated with locating or procuring the funding for the demonstration, A portion of the demonstration funding is , expected to come from the U.S. industrial partner. With skilled marketing, it is possible that additional funding may be made available from the LACN's federal or regional authorities, and/or from foreign aid organizations such as USAID;

- After the successful demonstration of the technology, HCET's International Development Group will publicize its results and work to ensure the maximum visibility for the technology. The success will be leveraged in soliciting future U.S. industry partners and LACN demonstration and implementation sites and customer-s.

HCET will follow the finding plans of aid-disseminating organizations such as the World Bank and the United States Agency for international Development (USAID). As a follow-up to its technology research, development, adaptation, transfer, and demonstration efforts, HCET also plans to produce and distribute information about the economic advantages of sustainable development in the LACNs. This information will clearly demonstrate that properly performed life-cycle analyses and system engineering work can result not only in cost savings but also in an improved environment.